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Los Alamos National Laboratory
Research Library
Year in review 2017

CONNECT

STEWARD

ILLUMINATE

**INFORMATION
IS OUR THING**

PRESERVE

DISCOVER

CREATE

Table of Contents

Message from the Library Director	3
Supporting Scientific Excellence: Collections	5
Library Management Systems	7
Reference and Research Support Services	8
Outreach	
Web Team	
Supporting the Research Lifecycle: Systems and Tools	10
Public Databases	
Internal Databases and Systems	
RASSTI	
Accepted Manuscripts for Public Access	
Metrics / LAPR	
ORCID	
Data Management	14
Digital Library Research & Prototyping	15
Staff Notables	19
By the Numbers	21

Message from the Library Director

2017 was a year of building and strengthening collaborations – internal and external. Collaborations with the laboratory’s classified information groups increased as a reference librarian began working in that environment quarter time. A “pipeline” person started in October 2017, who will work for the Research Library until their clearance is received and then move to the classified environment. These efforts enhance both groups’ ability to deliver more complete answers and information to customer inquiries. Outreach efforts were bolstered by the partnerships between the Research Library, the National Security Education Center, the Institutes and the LDRD Office.

Use of cloud platforms to reduce the use of physical servers was an area of much effort and angst. The move of our Ex Libris products to Alma in the cloud was a great success and learning opportunity. We are experimenting with open source platforms for data management and collaboration.

Data mining efforts were started. The Research Library has curated publications data and internal technical reports data. What can be learned from combining these two datasets? Efforts to combine the two have resulted in evidence-based use of the Laboratory’s review and release system.

Management of the physical footprint of the Research Library is a top priority. Efforts were started to reduce the size of the physical report collection housed in the Research Library’s vault. The Collaboration space and the new EasyIT space have significantly increased foot traffic in the building. The Laboratory’s new hires continue to increase, putting more demands on office and study facilities.

2017 was marked by key staffing changes: Dee Magnoni, library director 2014-2017, resigned from the laboratory to pursue new challenges in the academic world at Rutgers University. Two reference librarians, Joshua Finnell and Kelly Durkin Ruth, left the laboratory in 2017. Sara Sacks joined the reference staff in November. Work was focused on the hiring of a new library director, and positions for a collections management librarian and a software developer were advertised in 2017. A goal for 2018 is have all of these positions filled.

The strategic plan continues to drive major efforts. Notable outcomes include:

- Adoption of Alma and Primo in the cloud
- Matching final publications to Los Alamos Reports
- Nucleus Project pilot for data management

Many other important efforts are described in this report.

2018 will present new challenges and opportunities. The laboratory will have a new contractor beginning in October. The library will have a new director. We look forward to meeting new challenges and grabbing new opportunities to deliver tailored information and services to the laboratory.

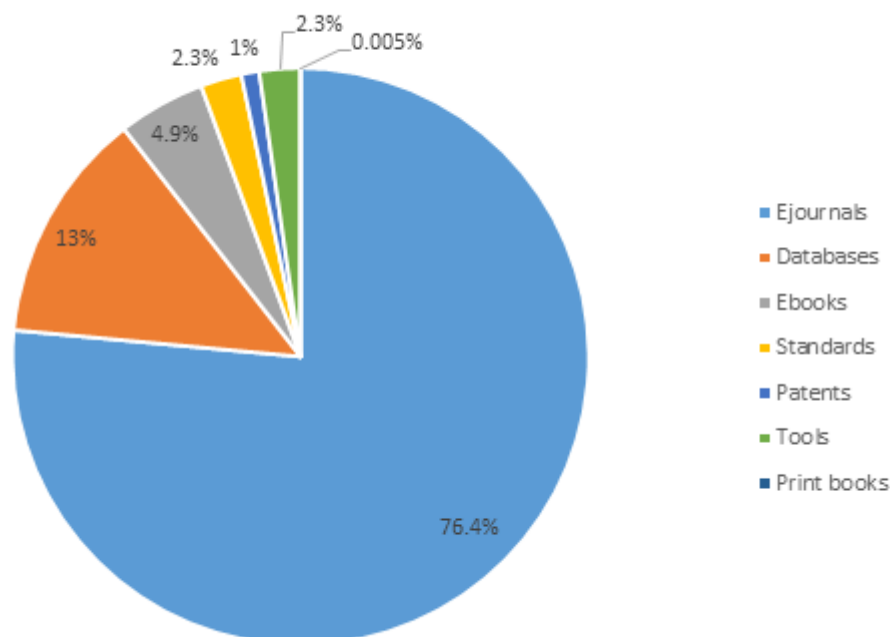
Frances Knudson
Acting Research Library Director

Supporting Scientific Excellence: Collections

The Research Library is dedicated to supporting the mission of the Laboratory: to solve national security challenges through scientific excellence. We achieve this by providing access to a robust and accessible collection of digital information resources. The Research Library's collection is a major asset for the Laboratory, a resource covering all disciplines in which the Lab performs its work. Our investment in digital information resources has a direct impact on the productivity of Lab employees. Our collections are available online for anytime, worldwide access, and are targeted to meet the demands of our customers.

In today's reality of rapidly increasing prices and declining purchasing power, the Research Library has sustained a collection that serves as a powerful agent for scientific, technical and operational excellence at LANL. The largest slice of our collection budget, 76.4%, is spent on the content that is in highest demand from our customers – electronic journals. 13% is spent on databases that enable discovery and access to the scholarly literature. 4.9% is spent on ebooks, both current and archival titles. Industry specs and standards occupy a healthy 2.3% of our budget and support work ranging from concrete and nuclear design to fire and welding protections.

FY17 RL Collection Budget, by Content Type

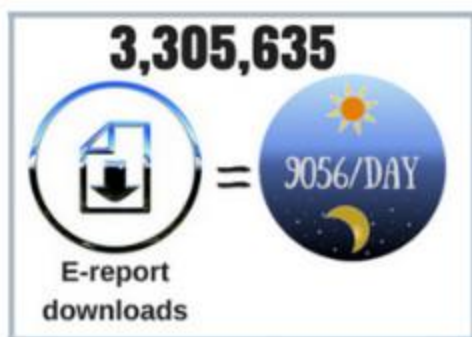


The Research Library's collection is curated in partnership with our customers, Lab employees, and designed to meet the needs of the Lab in delivering science and technology on a world class level.

Report Collection

The Reports Team supplies reports from all over the world to Laboratory researchers, and supplies publicly accessible Los Alamos reports to researchers from all over the world. Dozens of reports are requested each week.

In addition to online resources, the Reports Team relies on an extensive collection of physical reports (print and microfiche) stored in the Research Library vault. Once numbering close to 1 million reports, the team is in the midst of an extensive examination of this collection— weeding unused, out-of-scope, or duplicate reports to reduce the footprint of this physical collection. Part of this process includes scanning boxes of old Los Alamos paper reports. This past year over 2,000 LALP reports were scanned and are now available in Los Alamos Authors (where they can be downloaded by Lab researchers), as well as more than 4,000 LA-UR reports. These retrospective additions, along with the new Los Alamos documents collected electronically in RASSTI, help build the institutional repository for the laboratory.



Library Management Systems : Alma and Primo

In 2017 we implemented an integrated, cloud-based next generation system called Alma. This replaced multiple locally hosted systems - Aleph ILS, SFX link resolver, and Verde electronic resources management system, saving computer and system administration resources as well as providing new functionalities.

Alma facilitates acquisition and management of library materials in a world of electronic resources, with simpler, more efficient processes and extensive analytic data functionality. It handles cataloging, circulation, document delivery, and electronic resource activation and linking.

Several months went into configuration and testing the migration of data from Aleph and SFX. Hours of training were watched by staff, in real-time or recorded webinars. Integrations with complementary systems such as EZproxy, ftp services and vendor downloading. Alma went live on schedule on April 6, 2017.

At the same time, the Primo discovery system moved to the cloud. Primo took the place of the old online catalog, integrating searching for library collections with searching worldwide scholarly literature. Primo pulls data on library collections and electronic journal subscriptions from Alma in real time. Efforts to fine-tune the configuration of Primo to best work with Alma were undertaken and will continue into the coming year.



Reference and Research Support Services

The Reference & Research Support Team (formerly the Customer Engagement Team) connects Laboratory staff with the information and resources they need. The reference librarians and technical report experts engage in daily one-on-one interactions with Lab researchers. Services include broad or in-depth literature searching, training on current research tools, assistance navigating the Library's web resources and subscribed content, and on-demand requests. Articles from our print journal collection are scanned and emailed to customers each day. Document Delivery service is offered for articles that are not in our collections, and Interlibrary Loan service for books.

Research Library staff members also provide training on the Library's resources and services at group meetings, through online Research Guides and video tutorials, as well as in one-on-one sessions in researchers' offices. Training covers how to use library resources and systems, scholarly communication issues such as open access, copyright, citation management, and ways to increase the impact of research.

Outreach

Changes to the new employee onboarding process gave the Research Library an opportunity to rethink how and where we conducted outreach. Past efforts focused upon a 10-minute overview of library services and resources to all new employees as part of a day long orientation to the Laboratory. The new onboarding process omitted the Research Library from its schedule and although this closed an outreach opportunity, the presenters realized that this approach was less than ideal.

Striving to adjust our efforts to best meet the needs of our customers, we surveyed the engineering newcomers group and newly hired researchers with a brief informational email about services and resources the library provides and asked where they preferred to have library training and what they were interested in learning about. Responses indicated that researchers are most interested in receiving library training via online tutorials or training at their office or in the Research Library. Goals for 2018 include creating just-in-time training videos which will be available from the Research Library's webpage. We plan to send similar emails to new employees every quarter to raise awareness of the library resources and gauge the needs of our researchers. Our intention is to engage employees while they are still settling in to their place in the organization and after they have a better understanding of their workflows and information needs in their new roles.

Framing our outreach efforts as a form of relationship building has proven beneficial over the past year. Thanks to strong partnerships developed between the Research Library, the National Security Education Center, the Institutes and the LDRD Office, over 20 outreach sessions were conducted by request or on demand, serving approximately 210 staff and students, covering topics including RASSTI, ORCID, standards, and an overview of library resources in 2017. Librarians also conducted one-on-one research consults and participated in Laboratory-sponsored events, including Engineering Week, a student WSST fair, and the LANL Student Picnic. We hope to utilize these steps as a model for what we can do for our researchers.

Web Team

The Research Library Web Team manages the library website and content management system (CMS). It is responsible for ensuring users can find library resources and implements regular updates to the website, LibGuides, and Primo.

In 2017, the Web Team underwent significant changes. The team was restructured and documentation of best practices was developed. The website and CMS underwent an audit to clean and organize content. The initial audit was completed and subsequent maintenance is assigned and ongoing to ensure we can manage our pages efficiently.

After the audit, the Web Team began its first round of user testing. Team members devised a user test plan and recruited 10 participants from across the laboratory to evaluate aspects of the library website presence ranging from Primo to reports and document requests. The team used these findings to make improvements to the library website. More complex and difficult changes to enhance the user experience on the website and Primo are underway.

Supporting the Research Lifecycle: Systems and Tools

Publicly accessible databases



Los Alamos Research Online contains formal publications by laboratory scientists plus special collections, with links to publisher websites and to accepted manuscripts. Use continues to grow, with over half a million searches in 2017, making the results of the lab's federally funded research more widely available.

electronic public reading room

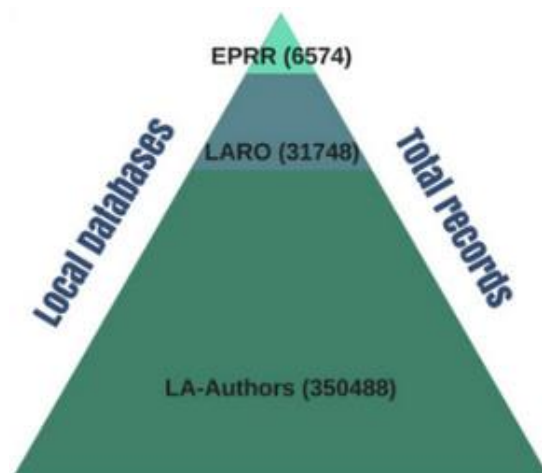
The Electronic Public Reading Room (EPRR) is managed by the Research Library for the Laboratory's environmental efforts. This resource will continue under the new Environmental Management contract awarded to Newport News Nuclear BWXT-Los Alamos. EPRR recorded 253,456 searches in 2017.

Internal Databases and Systems

We continue to support and develop laboratory specific datasets and systems for researchers – Los Alamos Authors (LA Authors), which provides access to LANL reports, LA in the Red, and LDRD Connexion.

los alamos authors

LA Authors and LA in the Red. These mirrored datasets contain records and full text links to the laboratory's reports. Daily ingests from RASSTI keep these collections current. Additional links to full-text content, in response to user requests as well as from several scanning projects for older reports. Improvements were made to the display of metadata for papers in journals and conferences. Efforts to add Los Alamos patents to this dataset commenced in 2017.



RASSTI (Review and Approval System for Scientific and Technical Information)

RASSTI is the online system used to review scientific and technical information (STI) before distribution outside the Laboratory. It also collects documents as the products of Lab research, supplying metadata and PDFs to internal and external repositories and to DOE.

RASSTI continues to grow in use and in importance. Enhancements for 2017 included:

- Ability to enter active or inactive program codes. This enhances tracking program outcomes.
- Ability to see average turnaround times. For 2017, an average turnaround time for DC/RLM reviewed DUSA is 3d 23h; full review (non-CUI) is 6d 4h; for a CUI full review 8d, 16h.
- Modification to DUSA workflow. This work started early 2017, in response to changes mandated by the Classification Office. The modified workflow requires training and omits the derivative classifier review. This modification will roll out in April 2018.

Customer feedback on usability of RASSTI was reviewed and ways to make RASSTI easier to use, especially in entry of author metadata, were investigated, which will lead to further changes in 2018.

Accepted Manuscripts for Public Access

The Research Library continued to collect accepted manuscripts, enabling the Laboratory to meet requirements for public access to federal research.

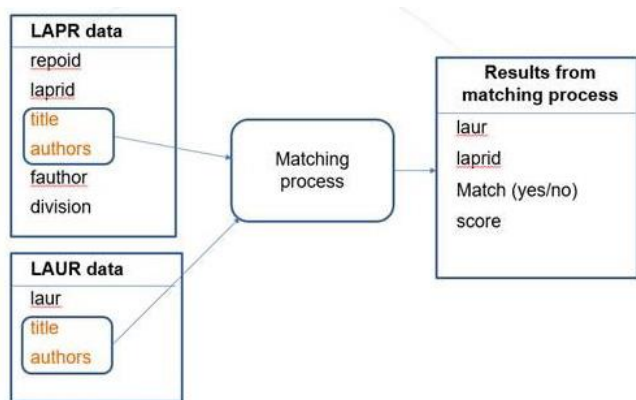
1243 accepted manuscripts were processed this year. We acquired accepted manuscripts directly from publishers where possible, and identified a few more publishers from which to do so. No new tools or processes were added in 2017. However, work began and is almost complete for adding conference proceedings metadata to accepted manuscripts.

Metrics / LAPR

The Research Library metrics team developed a multistep/multi-approach to compare Los Alamos Published Research (LAPR) records with LAUR records entered into the RASSTI system.

The LAPR dataset includes bibliographic data (metadata) regularly harvested from several commercially produced databases subscribed to by the Research Library (ISI, Inspec, BIOSIS, Scopus). Vendor data is augmented with LANL author-specific information such as Z number and group affiliation.

LAPR records were matched with LAUR records, employing direct matching of Digital Object Identifiers (DOIs) and fuzzy matching on authors & titles.



Percentages of LAPR records matched/not matched to an LAUR were calculated. Quarterly reports broken down by laboratory organization were assembled and distributed. LAPR records which did not match RASSTI records were analyzed and a sampling of authors were interviewed in order to better understand the varied reasons why a LAPR article might not be in RASSTI. This knowledge is being applied to facilitate and increase the use of RASSTI for LAURs and improve the match rate.

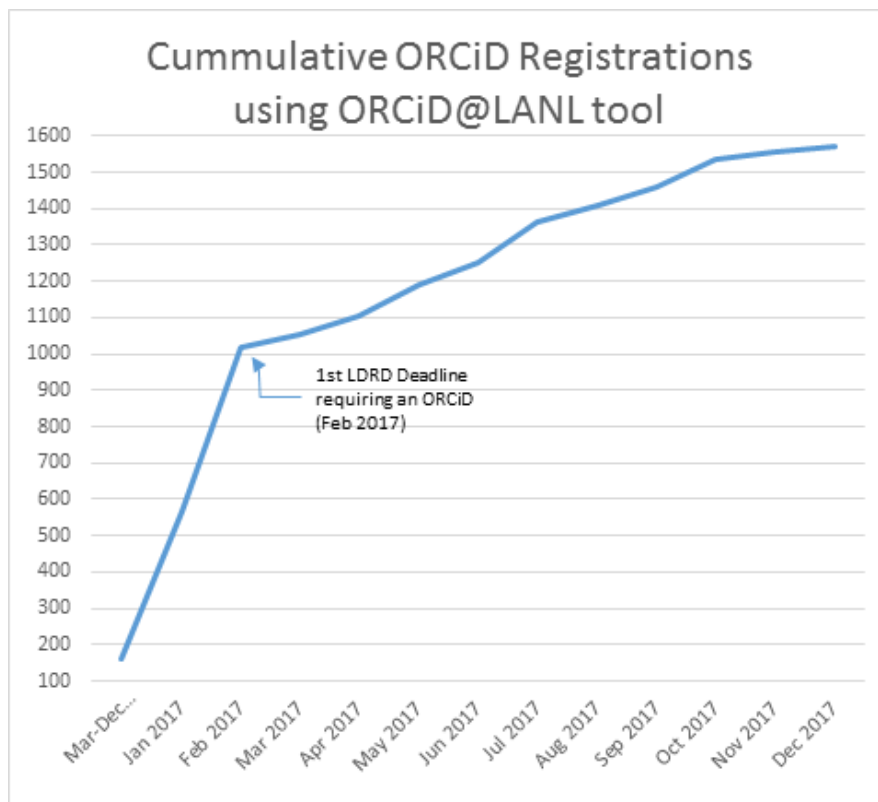
ORCiD

The Library's "ORCiD@LANL" tool, which debuted in 2016, allows researchers to leverage publication information maintained in Library/laboratory systems to create and/or update their ORCiD researcher profiles.



ORCiD icons are displayed in RASSTI and in LA Authors and Los Alamos Research Online search results. A LANL ORCiD Search tool, which finds an ORCiD by Z-number, was made available and linked from the Lab's internal phonebook.

A new requirement in the LDRD workflow to have researchers provide their ORCiD ids during the call for LDRD proposals encouraged greater collaboration efforts between the LDRD Office and the Research Library. Library staff assisted PIs and co-PIs in the ORCiD registration procedures linking existing ORCiD ids to the LANL ORCiD app. Over ~1745 researchers have registered for ORCiDs since January 2017.



Sample record in Los Alamos Research Online database. ORCiD icons link to ORCiD researcher profiles.

- 1. **Measurement of thermally-dependent lattice parameters in TATB for ratchet growth modeling**
Yeager, John David ; Luscher, Darby Jon ; Vogel, Sven C. ; Clausen, Bjorn ;
Brown, Donald William
Propellants, Explosives, Pyrotechnics ; Vol.41, iss.3, p.514-525 ; June 2016

Data Management

As the result of various planning meetings, a proposal was crafted in late 2016 to pilot institutional infrastructure that facilitates the management of research projects, research collaboration, and management, preservation, and discovery of data. The Research Library moved forward with implementation of this proposal and initiated the **Nucleus Project** pilot in January 2017.

Nucleus Project

- Pilot effort by the Research Library
- Initiated January 2017; 1 FTE hired; 4 PT contributors
- Based on a local install of the Open Science Framework software

Goal: address **internal** data management & collaboration

- Optimize a researcher's use of time by:
 - Making it easier to accomplish collaborative goals
 - Reducing number of steps to achieve goals
 - Reducing potential for errors when accomplishing goals
 - Improving project management, communication
- By deploying a platform that:
 - Streamlines workflows
 - Provides glue between systems/tools
 - Provides an overview of assets involved in research collaboration

The Nucleus Project software was installed on the LANL IoD computing environment and is accessible from both the Yellow and the OCE network. The Research Library has successfully connected Nucleus to various local systems including LANL authentication servers, LANL GitLab software development platform, and a preliminary RASSTI integration. We have begun testing the system with members of the Research Library as well as with parties outside the library that are interested in data management and collaboration tools.

Digital Library Research & Prototyping

Several activities that the Prototyping Team conducted were inspired by the Decentralized Web movement, which aims to re-distribute the web in light of the emergence, over the past decade, of massive social web portals such as Facebook, Twitter, Google, Amazon, ...

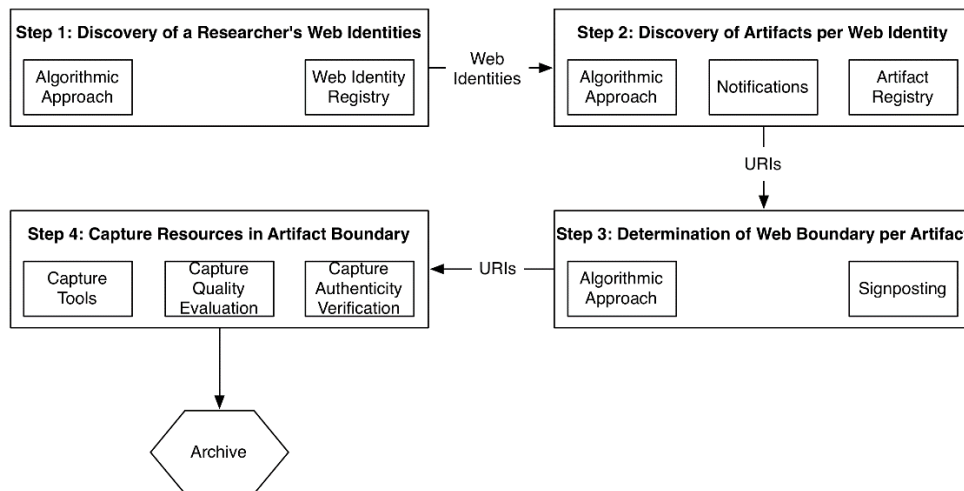
The potential application of decentralized web concepts to scholarly communication was explored in various ways:

- A range of standards that resulted from the W3C Social Activity (e.g. ActivityStreams2, ActivityPub, webmention, Linked Data Notifications, WebID, WebID-TPL) were studied and their potential application in scholarly workflows was assessed.
- Inspired by Sarven Capadisli's dokie.li research, the potential of a scholarly communication system based on self-publishing in a researcher's pod (storage environment) in a personal web domain was explored.
- Inspired by Amy Guy's research regarding personal web observatories, the nature and feasibility of a personal scholarly web observatory that tracks a researcher's activities across the web was explored.

These explorations remained in an experimental/explorative state and the high-level insights gained were communicated in a keynote for the Coalition for Networked Information in December 2017; a video recording is available at <https://www.youtube.com/watch?v=o4nUe-6Ln-8&t=3844s>. During a 3-week visit of Sarven Capadisli to the Research Library, an alternative to WebID-TLS to authenticate against personal pods was explored because the approach turned out to be error-prone and cumbersome. An alternative authentication approach using the OpenID Connect protocol in conjunction with ORCID authentication was successfully developed.

Progress was made regarding the "Towards a Web-Centric Approach for Capturing the Scholarly Record" project funded by the Andrew W. Mellon Foundation:

- An overall perspective on the workflow aimed at capturing scholarly assets deposited by researchers in web portals was devised. It is depicted in the below diagram.
- Regarding Step 1 of the diagram, the potential to use the ORCID database and its profiles to learn about web identities of researchers was explored. See also below.
- Regarding Step 2 of the diagram, the concept of portal-specific trackers that, e.g. through API calls, remain continuously aware of new/modified artifacts that a researcher deposits in portals was explored. These trackers can potentially play a role both regarding capturing the artifacts for archival purposes and as a means to feed a personal scholarly web observatory database.



Progress was made both regarding the ongoing Signposting and ResourceSync work by the team:

- Both Signposting and ResourceSync were prominently recommended as specifications that repositories should support in the “Next Generation Repositories” report by the Confederation of Open Access Repositories to which the team contributed significantly, see <https://www.coar-repositories.org/files/NGR-Final-Formatted-Report-cc.pdf>
- Two Internet Drafts were published that fit under the Signposting umbrella: “cite-as: A Link Relation to Convey a Preferred URI for Referencing” (see <https://datatracker.ietf.org/doc/draft-vandesompeel-citeas/>) and “Linkset: Media Types and a Link Relation Type for Link Sets” (see <https://datatracker.ietf.org/doc/draft-wilde-linkset/>).
- Prominent EC projects (EOSCPilot, OpenAIRE, OpenMinTED) invested funds to support implementing Signposting and/or ResourceSync for repositories that are part of their ecology. For example, the UK-based CORE open access research paper aggregator (see <https://core.ac.uk/>) implemented ResourceSync both as a way to obtain articles from publishers and to expose its own holdings. Also, ResourceSync has also become the method of choice for cross-repository synchronization of Linked Data in the Dutch inter-university DARIAH project.

There were noteworthy evolutions regarding the Memento protocol:

- The Fedora API (see <https://wiki.duraspace.org/display/FEDORA4x/RESTful+HTTP+API>), which will be used for future Fedora repository systems, natively supports the Memento protocol for time-based access to Linked Data Platform. But it also defines a Memento-inspired manner to perform write operations (of resource versions) for Linked Data resources. The team worked with Fedora specification editors and developers to ensure full compatibility with the Memento protocol.
- Explorations started to add expressiveness of top of the Memento protocol aimed at supporting requests for specific types/renderings of Mementos (e.g. without rewritten links, without banner), see <http://ws-dl.blogspot.com/2016/08/2016-08-15-mementos-in-raw-take-two.html>. Especially the use of the HTTP Prefer and Preference-Applied headers turned out promising with this regard. A community discussion was started aimed at gaining consensus about the best way forward.

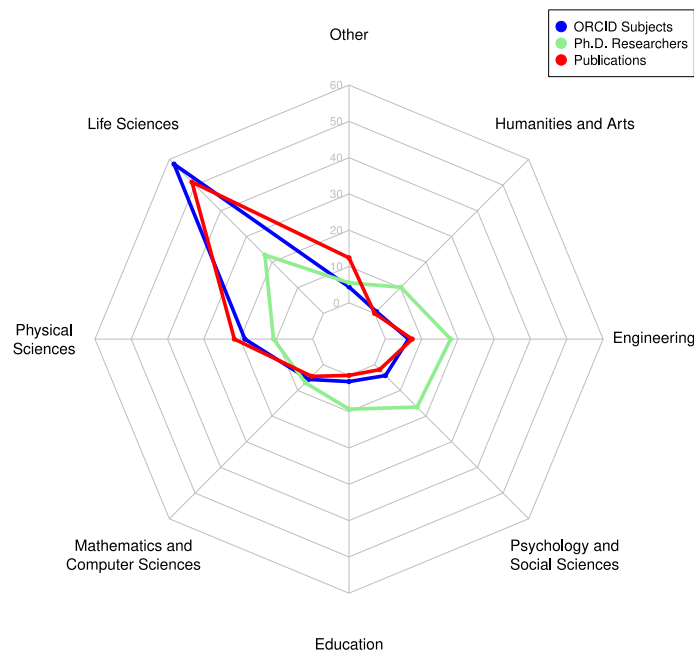
- The Memento-related Robust Links approach attracted increased attention as a result of various communications by the team. The potential for broader adoption, though not certain, looks promising.

The team launched and actively contributed to the Nucleus project, which created a proof of concept for a LANL-based research collaboration platform based on the Open Science Framework software. The platform aims at improving cross-lab collaboration but is also considered a first step towards systematic research data management.

Novel Research

During the first half of 2017 members of the Prototyping team published the paper “Discovering Scholarly Orphans Using ORCID” (<https://doi.org/10.1109/JCDL.2017.7991573>). This work is based on the notion that researchers are depositing a broad variety of scholarly artifacts (slides, source code, videos, etc.) into emerging online portals that are designed to support web-based scholarship. However, these web-native scholarly objects are largely neglected by current archival practices and hence become scholarly orphans. The paper summarizes the results of the team’s study to investigate the feasibility of using Open Researcher and Contributor ID (ORCID) as a supporting infrastructure for the process of discovery of web identities and scholarly orphans for active researchers. The team analyzed ORCID in terms of coverage of researchers, subjects, and location and assessed the richness of its profiles in terms of web identities and scholarly artifacts. The results show that ORCID currently lacks in all considered aspects and hence can only be considered in conjunction with other discovery sources. However, ORCID is growing fast so there is potential that it could achieve a satisfactory level of coverage and richness in the near future.

The figure below, taken from the paper, shows a comparison of ORCID subjects, fields of study of doctorate recipients, and subjects of publications in the U.S.



In the second half of 2017, the Prototyping team conducted further innovative research in the realm of focused crawling of web archives. This effort was motivated by the fact that event-centric web collections are frequently built by crawling the live web on the basis of seed URIs nominated by human experts – a situation that has numerous drawbacks such as the lack of scalability and the issues of timing of the crawl and the relevance of seeds. Focused web crawling is a technique where the crawler is guided by reference content pertaining to the event. The study focuses on investigating the feasibility of performing focused crawls on the archived web. By utilizing the Memento infrastructure, we obtained resources from 22 web archives that contribute to building event collections. We created collections on four events and compared the relevance of their resources to collections built from crawling the live web as well as from a manually curated collection. The results show that focused crawling on the archived web can be done and indeed results in highly relevant collections, especially for events that happened further in the past. The team summarized the results in a research paper that is currently under review and expected to be published in 2018.

Staff Notables

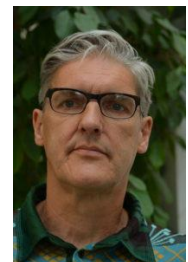
Conferences/ Presentations/ Societies:

In 2017, over 36 national and international conferences were attended by the Research Library staff. These included Professional Library Associations as well as areas of Digital Archiving, Scholarly Communications and Open Access Repositories. Numerous staff members presented talks at these conferences and workshops, many as keynote speakers. In addition, Research Library staff serve as elected officers in many professional associations as well as sit on advisory boards and governing councils for various scientific and engineering groups. Some staff are honored by serving as peer reviewers for international scientific conferences and sit in on PhD Committees for candidates in the information technology arena.

This past year, Herbert Van de Sompel was on a Professional Research and Teaching Leave at DANS, The Hague, in the Netherlands. As a result of his renowned work in Open Archives initiative and standards, he was host to several guest scientists from Europe to collaborate with the LANL Research and Prototyping Library Team. This offered an opportunity to share ideas for distributed web approaches in scholarly communication, which benefited both the guest's university as well as LANL researchers.

Awards:

Herbert Van de Sompel was presented with the 2017 Paul Evan Peters Award, offered jointly by the Association of Research Libraries, the Coalition for Networked Information and EDUCAUSE. This award recognizes the most notable and lasting international achievements related to high performance networks and creation and use of information resources and services that advance scholarship and intellectual productivity. For more information, see <https://www.cni.org/news/van-de-sompel-peters-award>.



Frances Knudson received LANL's 2016 Distinguished Performance Award for her work in integrating several scholarly systems to better serve communication across the Lab. She brought together (RASSTI) Lab's Review and Release System; (LA Authors) submitted scholarly content dataset; (EPRR) the Environmental Published Research Repository, and (LARO) Los Alamos Research Online - the first publicly facing Department of Energy institutional repository.



Selected Presentations and Publications:

Finnell, Joshua and Brian Cain. Meeting challenges in the data world: RDAP 2017. *International Information and Library Review*; Vol.49, iss.4, p.310-312, 2 October 2017

Finnell, Joshua, and Brian Cain, Unclassified: Research Data Management at Los Alamos National Laboratory. *Digital Library Federation Forum 2017*, October 23-25, 2017. Pittsburgh, Pennsylvania.

Fox, Edward A., Xie Zhiwu, and Martin Klein. Web archiving and digital libraries (WADL). *2017 ACM/IEEE Joint Conference on Digital Libraries (JCDL)*; 19-23 June 2017; Toronto, ON, Canada

Knudson, Frances. LANL Research Library's implementation of ORCiDs. *STIP 2017: Success Through Innovation and Partnership*, May 3-4, 2017, Idaho Falls, Idaho.

Kelly, Matt, Lulwah M. Alkwai, Sawood Alam, Michael L. Nelson, Michele C. Weigle, and Herbert Van de Sompel. Impact of URI canonicalization on Memento count. *2017 ACM/IEEE Joint Conference on Digital Libraries (JCDL)*; 19-23 June 2017; Toronto, ON, Canada

Klein, Martin and Herbert Van de Sompel. Discovering Scholarly Orphans Using ORCID. *2017 ACM/IEEE Joint Conference on Digital Libraries (JCDL)*; 19-23 June 2017; Toronto, ON, Canada

Magnoni, Dee. Shaping the Future: Strategic Planning, Competencies and Staff Modeling. *6th International Library and Information Professionals Summit 2017*, April 6-8, 2017, Mohali, India.

Mittrach, Michelle and Kelly Durkin Ruth. "Outreach & instruction in the 'Secret City'." *Information Outlook*, Vol. 21, iss. 5, Sep/Oct 2017: 19-20,22.

Mittrach, Michelle and Durkin Ruth, Kelly. "Building an outreach & instruction program at Los Alamos national laboratory." Poster, *SLA Annual Conference*, June 17, 2017, Phoenix, AZ.

Powell, James, Martin Klein and Herbert Van de Sompel. Autoload: a pipeline for expanding the holdings of an Institutional Repository enabled by ResourceSync. *Code4Lib Journal*, iss.36, April 1, 2017: 1-12.

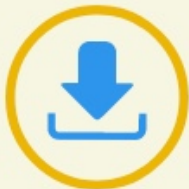
Varjabedian, Kathy. Keeping up: Can Primo metadata enable useful New Record alerts?, *ELUNA Annual Conference 2017*, May 9-12, 2017, Schaumburg, Illinois.

Los Alamos National Laboratory Research Library, April 2018.
Editor, Kathy Varjabedian.

BY THE
numbers
2017



E-Discovery Tools:
of Total searches



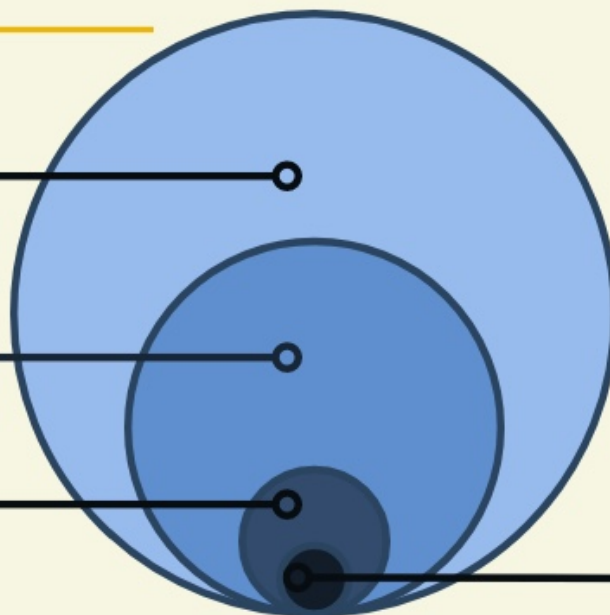
Usage

3,305,635 E-Report Downloads

220,000 Website Views

8,100 Remote Access sessions

1,100 Research Guide Views



2017 by the numbers



Services

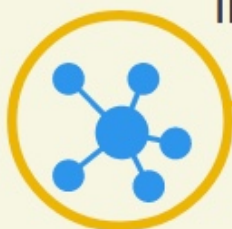
1,745 ORCiDs Registered
210 Library Training Attendees
36,569 Books Circulated
4,539 Questions Answered



Collections



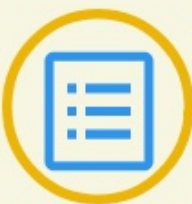
#Ebooks 289,000 #Technical Reports 409,000
Journals available in the Library (print): 3,295
Journals available online 30,078 #Standards 115,000



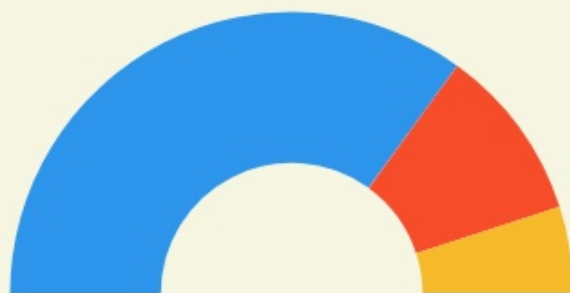
Institutional Scientific Content



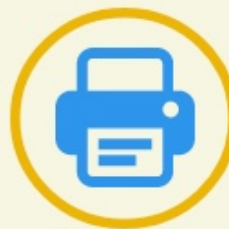
107,000 Reports scanned (and other sources)
62,000 RASSTI Submissions
11,985 LAURs assigned
642 LA-CPs assigned



Local Databases: Total # of records



Los Alamos Authors Database 350,488 Los Alamos Research Online 31,748
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Requests

